

ON THE EXTENSION OF THE GENUS *MACROCHLAMYS* TO THE ISLAND OF MAURITIUS.

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PLATE XVIII.

I LAST month received from Mousieur E. Dupont, through Mr. John Ponsonby, three specimens, preserved in spirit, accompanied by the following short note by the donor:—" *Nanina* sp. from Mauritius, differing from *N. semifusca*, Desh. = *N. scalpta*, Mart., by its more shining appearance and more rounded periphery; resembles also *Nanina renitens*, Morel. of Mayotte. The animal has been drowned in fresh water before being put in spirits."

I have been trying for some years to obtain the animals of certain species of land mollusea from this part of the world, and lately, through the kind interest of the late Governor, Sir Charles Bruce, K.C.M.G., I got at last into communication with the Colonial Secretary and the Curator of the Muséum des jardins. My thanks are due to them and particularly to M. Dupont for the material which I now describe.

The bottle contained three specimens, two with their shells, one without. On looking them over, this last, I considered, was another species, quite distinct from the other. On a comparison of their respective external characters, I was still further agreeably surprised to find that these were typical of that very widely-spread Indian genus *Macrochlamys*. I at once proceeded to examine the animal of a specimen (having its shell) in detail, and as the several organs came to view, they each agreed in a most interesting degree of similarity with the respective organs of that genus. So similar were they, I felt at the time I was dealing with an importation into the Mauritius from some part of India. There was, however, less reason for this supposition when specific identification commenced.

I have refrained until now from cutting up the specimen sent without a shell in order to compare it better when further material may come to hand. That it belongs to the same genus I have not the slightest doubt, and the figures illustrating this paper sufficiently show this, the right and left shell-lobes being well developed (Figs. vi, vii). On writing to Mr. J. Ponsonby, after examination of the specimens, to tell him I had made out two species, he informed me he had identified three species among shells he had lately received from M. Dupont, as *scalpta*, v. Mts. The interest surrounding these land shells is thus still more increased. Mr. Ponsonby very kindly offered to send me examples to look at, and having done so I have no hesitation in confirming his opinion, and the late Dr. W. T. Blanford, to whom I showed them, coincided. What species they

really represent is a nice puzzle in identification and nomenclature, a subject for a future paper which I trust Mr. Ponsonby will eventually give us. I therefore restrict myself to a description of the animals, and shall say nothing of the shells.

MACROCHLAMYS, sp. A; Mauritius. Pl. XVIII, Figs. I-IV.

Animal with a long foot, pale grey in colour, right shell-lobe very short and blunt (Fig. I), recalling that of *M. pedina* of Bombay,¹ the left (Fig. II) feebly developed, triangular on a broad base; dorsal lobes as usual, the left in two parts, the posterior the smallest; peripodial grooves well marked, the fringed margin with its groovings numerous and set close together (Fig. IV); mucous gland at extremity of the foot large, and with an overhanging lobe; sole of foot with a central area.

The *genitalia* (Fig. III).—The amatorial organ is very large, long, and cylindrical, tapering gradually with the end, terminating rather squarely where the long retractor muscle is attached.

The penis has a large coiled cæcum, where it bends on itself. The retractor muscle is attached to it in the usual way. At the junction of the vas deferens with the penis a long flagellum is given off; the vas deferens itself is short, and thicker than usually seen, and it joins the prostate just above a swollen ochre-coloured portion of the vagina duct. Just below this is the spermatheca, very long, ample, and swelling slightly towards the free end. The jaw is dark-coloured, solid, strongly arched, with a projection on the cutting edge.

The radula has the formula 46 : 20 : 1 : 20 : 46, or 66 : 1 : 66, altogether 132 teeth in the row. The central tooth and admedians are rather narrow, sharply pointed teeth, with a cusp low down on the outer side; these at the twentieth tooth gradually merge into bicuspid laterals, the cusp well below the point, and as far as the outermost small teeth they never become evenly bicuspid.

Of the rest of the anatomy there is nothing specially noticeable in the characters described. This species agrees in every way with an Indian *Macrochlamys* of typical species of Lower Bengal, such as *indica*, G.-A., from Calcutta, and in this connection even the type of shell-sculpture is the same, as well as the general form of the shell, so much so that I looked up the formula of the radula of *indica* to see what correspondence there might be; it differs very materially, being 34 : 2 : 9 : 1 : 9 : 2 : 34, or 45 : 1 : 45, or with only half the number of large admedian teeth.

MACROCHLAMYS, sp. B; Mauritius. Pl. XVIII, Figs. V-VII.

Animal not quite so grey as species A, but the membrane covering the branchial cavity is blacker, and freckled with the same colour, not seen in the other two specimens.

The fringe on the peripodial margin is in wider segments, and the longitudinal grooves leading upward from the peripodial grooves to the keel of the foot are very strongly marked. The mucous pore

¹ *Ide* l., and F.W. Moll. Ind., pl. xxxiii, fig. 1.

